



## NOAA Research in West Virginia



### WV-1 (Canaan Valley)

#### **Air Resources Laboratory Atmospheric Integrated Research Monitoring Network**

AIRMoN, or Atmospheric Integrated Research Monitoring Network, is an array of sampling stations designed to quantify the extent to which changes in emissions affect air quality and deposition. NOAA's Air Resources Laboratory operates both elements of the network, AIRMoN-Wet and AIRMoN-Dry. AIRMoN-Wet collects data on the deposition of pollutants that occurs with precipitation. Daily samples of precipitation are collected at 10 stations throughout the country and then sent to a single central laboratory for chemical analysis. The Air Resources Laboratory's Atmospheric Turbulence and Diffusion Division in Oak Ridge, Tennessee, operates the second element of the network, AIRMoN-Dry. The goal of AIRMoN-Dry is to identify and understand the processes that cause the deposition of atmospheric pollutants without the presence of precipitation in order to quantify dry deposition rates at locations where direct measurement is not possible. Both an AIRMoN-Wet and an AIRMoN-Dry station are located in the Canaan Valley. Prime users of these data include ecologists, agriculturists, foresters, and power companies affected by Clean Air Act legislation. For more information please visit <http://www.arl.noaa.gov>

### WV-1 (Davis)

#### **Air Resources Laboratory Atmospheric Observation Station**

The acid rain concerns of the 1980s and 1990s drew attention to the fact that eastern West Virginia is a major recipient of pollutants carried through the air from the midwest. The ecosystems of the eastern highlands of West Virginia remain at risk, raising concerns about the continued viability of the area as a recreational resource. Scientists from the Air Resources Laboratory (ARL) are actively working with colleagues stationed in eastern West Virginia to address the questions that arise from a multi-media viewpoint coupling the atmospheric, terrestrial, and aquatic environments. A major observation station has been set up near Davis where measurements are made of a wide range of atmospheric properties, from air chemistry to ultraviolet radiation and snowfall. This site serves as one of the intersection points shared by several of the subnetworks operated by ARL under its Atmospheric Coordinated Observations and Research Study. A new focus on the role of atmospheric nitrogen and its role as a nutrient is now starting, using this site as a basis for expanded research. This work is in collaboration with the Canaan Valley Institute, several U.S. agencies, and a number of universities with interest in the area. For more information please visit <http://www.arl.noaa.gov>

For further information about these and other NOAA programs, please contact NOAA's Office of Legislative Affairs at (202) 482-4981.

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